SJVAPCD CCOS/CRPAQS Meteorological Data Validation Process
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Objectives

- Quality assured meteorological data set
- Representative both temporally and spatially
    - Model scale
    - Phenomena scale
- Generate data set capable of improving model field
- Applied to both FDDA and evaluation
- Reproducible/Well Documented

Methodology/Rules/Criteria

- Look at sites in cohesive flow and scan for outliers
- Are there plausible explanations for outliers?
- Will observation assist in reproduction of known phenomena?
- Representativeness testing using closest neighbors
- Assess sites for representativeness where there is low data density
- Review instrument siting analyses for representative scale

Applicable CCOS Reports

- T&B Systems, Adequacy and Validity of Meteorological Measurements
- STI, Final Validation of CCOS Fields

Analyses Preformed by SJVAPCD

- Quality Assurance
    - Missing Sites
    - Sites with obvious problems
    - Negative temperatures
    - Units problems
    - Agreement with BAAQMD and ARB findings
    - Modification of database
- Qualitative Checks with ARB Data Base
- Model output review with ARB dataset
- Review for expected meteorological features (eddy, slope flows, marine…)
- Produced graphical interface and reviewed fields

Potential Solutions

- Eliminate some networks for thinning (CIMIS, NWS, RAWS)
- Analysis of all data (not which has already been thinned)
- Look for low measurement density areas and decide what to keep or toss
- Iterative and interactive consensus process with Districts and ARB
- Adequate documentation